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## CLAIMS

1. A metrics server in an intranet comprising:  
a network interface device configured to non-intrusively measure network traffic transferred in and out of an intranet for at least one connection, the at least one connection being a logical path from a specific source to a specific destination; and

a processor coupled to the network interface device and configured to generate performance metrics for a predetermined measurement time interval using the measured network traffic for the at least one connection.

2. The metrics server of claim 1 wherein the at least one connection is delimited by a first packet from the specific source to the specific destination and a last packet from the specific source to the specific destination.

3. The metrics server of claim 2 wherein the specific source is identified by a source Internet Protocol address in the first packet and the specific destination is identified by a destination Internet Protocol address in the first packet for the at least one connection.

4. The metrics server of claim 3 wherein the specific source is the metrics server and the specific destination is at least one client outside the intranet and the measured network traffic includes packets being transferred between the metrics server and the at least one client.

5. The metrics server of claim 3 wherein the specific destination is at least one client outside the intranet and the specific source is at least one server in the intranet and the measured network traffic includes packets being transferred between the at least one server and the at least one client.

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C 5 6. The metrics server of claim 4 wherein the network interface device is further configured to filter the measured network traffic such that only header information contained within the packets being transferred are captured by the network interface device.

10 7. The metrics server of claim 6 further comprising a memory coupled to the network interface device and the memory stores the measured network traffic.

Sub A2 15 8. The metrics server of claim 7 wherein the memory further stores an active connection table containing entries for the at least one connection that is active during the predetermined measurement time interval.

C 20 9. The metrics server of claim 8 wherein the processor is further configured to update the active connection table based on the measured network traffic and the predetermined measurement time interval.

25 10. The metrics server of claim 9 wherein the processor is further configured to accumulate the performance metrics generated for the at least one connection that extends pass the predetermined measurement time interval.

30 11. The metrics server of claim 10 wherein the processor configured to generate performance metrics includes the determination of source and destination Internet Protocol addresses and timestamp information of the packets captured within the predetermined measurement time interval.

Sub A3 35 12. The metrics server of claim 11 wherein the predetermined measurement time interval is one minute.

1           13. The metrics server of claim 12 wherein the network  
interface device is further configured to intrusively measure  
network traffic transferred in and out of the intranet for the  
5   at least one connection for the generation of a specific  
performance metric.

10           14. A measurement infrastructure comprising:  
a plurality of clients outside an intranet;  
at least one server inside the intranet coupled to the  
plurality of clients outside the intranet; and  
a metrics generator coupled to the at least one server, the  
metrics generator is configured to non-intrusively measure  
network traffic being transferred in and out of the at least one  
server and to generate performance metrics from the network  
15   traffic measured.

20           15. The measurement infrastructure of claim 14 wherein the  
network traffic measured by the metrics generator includes  
packets being transferred for at least one connection, the at  
least one connection being a logical path from the metrics server  
to one of the plurality of clients outside the intranet.

25           16. The measurement infrastructure of claim 15 wherein the  
performance metrics generated by the metrics generator is for a  
predetermined measurement time interval using the measured  
network traffic for the at least one connection.

30           17. A measurement infrastructure comprising:  
a plurality of clients outside an intranet; and  
a first metrics server inside the intranet coupled to the  
plurality of clients and configured to non-intrusively measure  
network traffic being transferred in and out of the intranet and  
to generate performance metrics based on the network traffic  
35   measured.

1 18. The measurement infrastructure of claim 17 wherein the  
network traffic measured by the first metrics server includes  
packets being transferred for at least one first connection, the  
5 at least one first connection being a logical path from the first  
metrics server to one of the plurality of clients outside the  
intranet.

10 19. The measurement infrastructure of claim 18 wherein the  
performance metrics generated by the first metrics server is for  
a predetermined measurement time interval using the measured  
network traffic for the at least one first connection.

15 20. The measurement infrastructure of claim 19 further  
comprising a second metrics server that is configured to non-  
intrusively measure network traffic being transferred in and out  
of the intranet and to generate performance metrics based on the  
network traffic measured.

20 21. The measurement infrastructure of claim 20 wherein the  
network traffic measured by the second metrics server includes  
packets being transferred for at least one second connection, the  
at least one second connection being a logical path from the  
second metrics server to one of the plurality of clients outside  
25 the intranet.

30 22. The measurement infrastructure of claim 21 wherein the  
performance metrics generated by the second metrics server is for  
a predetermined measurement time interval using the measured  
network traffic for the at least one second connection.

35 23. The measurement infrastructure of claim 22 wherein the  
first metrics server distributes performance metrics generated  
by the first metrics server to the second metrics server in the  
intranet.

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24. The measurement infrastructure of claim 23 wherein the second metrics server distributes performance metrics generated by the second metrics server to the first metrics server in the intranet.

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25. The measurement infrastructure of claim 24 wherein the distributed performance metrics includes only the performance metrics generated by the first metrics server and the second metrics server that are different from any previously distributed performance metrics by the first metrics server and the second metrics server.

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26. The measurement infrastructure of claim 24 wherein the performance metrics generated by the first and second metrics servers are distributed on a predetermined periodic basis.

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27. The measurement infrastructure of claim 26 wherein the predetermined periodic basis is one minute after performance metrics have been generated by the first and second metrics servers.

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28. A method of providing network performance metrics using an intranet, the intranet having at least one server, the method comprising:

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non-intrusively measuring network traffic between at least one server in an intranet and at least one client outside the intranet; and

generating performance metrics from the network traffic measured between the at least one server and the at least one client within a predetermined measurement time interval.

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29. The method of providing network performance metrics of claim 28 wherein the non-intrusive measurement of network traffic

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1 and the generation of performance metrics are performed by the  
at least one server.

5 30. The method of generating network performance metrics  
of claim 29 wherein the non-intrusive measurement of network  
traffic includes copying packets being transferred between the  
at least one client and the at least one server to a memory  
buffer of the at least one server.

10 31. The method of generating network performance metrics  
of claim 30 further comprising intrusively measuring network  
traffic between the at least one server and the at least one  
client in an intranet.

15 32. The method of generating network performance metrics  
of claim 31 wherein the intrusive measurement of network traffic  
includes injecting and monitoring probing packets that are  
transferred between the at least one server and the at least one  
client outside the intranet.

20 33. The method of generating network performance metrics  
of claim 32 further comprising distributing performance metrics  
generated by the at least one server to another at least one  
server inside the intranet.

25 34. A method of providing network performance metrics using  
an intranet, the intranet having at least one server, the method  
comprising:

30 non-intrusively measuring network traffic for at least one  
connection, the at least one connection being a logical path  
between at least one server inside an intranet and at least one  
client outside the intranet;

35 generating performance metrics from the network traffic  
measured based on the at least one connection within a  
predetermined measurement time interval; and



1 accumulating the generated performance metrics for the at  
least one connection that remains active beyond the predetermined  
measurement time interval.

5 35. The method of generating network performance metrics  
of claim 34 further comprising distributing performance metrics  
generated.

10 36. The method of generating network performance metrics  
of claim 35 further comprising intrusively measuring network  
traffic for the at least one connection.

15 37. A method of providing network performance metrics using  
an intranet, the intranet having at least one server, the method  
comprising:

20 examining packets being transferred during a plurality of  
connections, such that each connection of the plurality of  
connections is a logical path between at least one server in the  
intranet and at least one client outside the intranet;

generating performance metrics from the examined packets for  
the plurality of connections upon the expiration of a  
predetermined measurement time interval;

25 accumulating performance metrics from the generated  
performance metrics for the plurality of connections for each of  
the plurality of connections that remain active beyond the  
predetermined measurement time interval;

30 creating a record for each connection of the plurality of  
connections that are active during a predetermined measurement  
time interval; and

deleting each created record corresponding to each  
connection of the plurality of connections that becomes inactive  
beyond the predetermined measurement time interval.

35 38. The method of generating network performance metrics  
of claim 37 further comprising distributing performance metrics

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generated and accumulated upon the expiration of a predetermined measurement time interval.

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39. The method of generating network performance metrics of claim 38 further comprising continuing to examine packets and generate, accumulate and distribute performance metrics for a plurality of successive predetermined measurement time intervals.

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